faxed 11/4/91

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

NOV 4 1991

Mr. William Smith
Paul C. Rizzo Associates, Inc.
220 Continental Drive
Suite 311
Newark, DE 19713

Re: Tonolli Corporation Superfund Site
Comments on Round 2 RI Data Validation Summary

Dear Mr. Smith:

Enclosed with this letter is a copy of my Regional Laboratory's review memorandum regarding the Round 2 Data Validation Summary submitted in conjunction with the Tonolli Site Remedial Investigation reports. Please note that EPA has found several discrepancies in the handling and validation of the Round 2 RI data. The comments, questions, and requests for missing documentation must be addressed as soon as possible. The integrity of the RI data must be resolved so that we can proceed with the technical reviews and decision-making for the clean-up of the Site.

Please review the enclosed memorandum and contact me regarding how and when you would like to address these matters. My contact at EPA's Central Regional Laboratory is available to participate in the November 7 meeting to go over these comments with you, if you so desire. If this does not allow you sufficient time to prepare, we can also try to address these matters via a conference call. I will be out of the office on Tuesday, November 5, but will plan to be in the rest of the week. Please contact me at (215) 597-1101 to confirm plans for addressing the enclosed.

Sincerely,

Donna M. McCartney

Donna M. McCartney (3HW27)
Project Manager

Enclosure

EPA

U.S. Environmental Protection Agency
Region III
841 Chestnut Building, Phila., PA 19107

Please deliver at once to

Name Bill Smith, Paul C. Rizzo Assoc. Phone 412 754-7902 Mail Code ______

This page is followed by a 6 page transmission
Time Sent 8am Day/Date Sent 11/4/91

Please call ______________ at (215) 597- ______
to acknowledge receipt of this Fax
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
CENTRAL REGIONAL LABORATORY
839 BESTGATE ROAD
ANNAPOLIS, MARYLAND 21401
(301) 266-9180

DATE : October 23, 1991

SUBJECT : Tonolli Data Review - FY 92004

FROM : Mike Ellickson
Env. Sci., Program Support Section

TO : Donna McCartney
Remedial Project Manager

THRU : Diann Sims
Acting Chief, Program Support Section

The oversight for the Round 2 Data Validation Summary, dated October 1991, at the Tonolli Corporation Superfund Site has been completed. As requested, the following comments relate to the accuracy and completeness of the data as well as the overall quality and usability of the data for decision-making:

1. The data package does not contain all of the Form Is from the laboratory and, therefore, a complete check for transcription errors from the Form Is to the Data Summary Tables (DST) could not be done. It is estimated about one fourth of the total sample data could be checked from the Form Is onto the DST. One transcription that was checked indicated an error. The lead value in sample SO-S62-1 of Sample Delivery Group (SDG) TON20 is 3,550 mg/Kg in the DST and this value is crossed out and "void" written beside it on the Form I. It is assumed that this value should be 9,740 from SDG TON20A.

Some transcription values were not rounded in accordance with the Statement of Work. For example, sample SO-S64-0 for lead was rounded to 83 mg/Kg on the DST. The Form I for this sample 82.8 mg/Kg. Although these are extremely minor errors from a data aspect, the data package states that "formal data validation" proceeded according to the guidelines established in the "USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis, July 1988". This Statement of Work stipulates that values below 10 be rounded to two significant figures and the values above 10 be rounded to three significant figures.

2. The lead values on the Form Is in SDG TON16, SDG TON30 and SDG TON30A can not be found on the Data Summary Tables. The narrative for SDG TON16 states that these samples were analyzed for lead only. Also, according to Appendix B in the data package, SDG TON30 and SDG TON30A are addendums to SDG TON16. These sample values may be on the DST in another SDG but they could not be reconciled.

3. In SDG TON18, SDG TON19, and SDG TON20 the Form Is were evidently meant to be double-sided copies and one side did not get copied. Every other Form I is missing in these SDGs. In SDG 20 the laboratory sample number 1672506 is only partly copied and cannot be verified. Because of the above, no oversight for transcription errors could be done on these samples.

4. As stated above the data package states that "Laboratory Data Validation Guidelines for Evaluation Inorganic Analyses, July 1988" and the "Region III Modifications to the Inorganic Functional Guidelines, July 1990" were used as the guidelines for data validation. The DST has many qualifiers that are not used in the above referenced documents. The qualifiers on the DST that are not in accordance with the above documents are as follows:

"U" - This qualifier is used by the laboratory on the Form I to indicate an undetected analyte. It is not used as a qualifier on Data Summary Forms or, in this case, the Data Summary Table.

"LT" - which was defined as less than quantitation limit. This notation is not used.

The Asterisk ("*") - is not used as a qualifier for data; it is used by the laboratory on the Form I to indicate that the duplicate analysis was not within control limits in accordance with the USEPA Statement of Work.

"JK" is not used as a qualifier in the National Functional Guidelines nor in the Region III Modifications. It should be noted that for inorganic validation, the only two double letters used are "UJ" and "UL" to indicate an estimated detection limit and an undetected result with a low bias, respectively.

"*JK", "*BJ", "BJ", "*B", "B*J", "B*", and "*J", are not used for the reasons stated above.

5. In Appendix C there are five pages of chain-of-custody forms that are unreadable because of poor reproduction (between SDG20A and SDG22). Therefore, correlation with the SDGs for holding times, etc., could not be accomplished.

6. The sample numbers on the DST are difficult to correlate with the "Rizzo Sample ID" and lab I.D. cross reference pages in Appendix C. As example, sample RD2-MW-16D on DSF was found to be lab sample 1672508 and cross-referenced as GW-RD2-16D in Appendix C. Is "MW" or "GW" in error or is this intended to be the sample notations? It is customary that the cross-reference pages for a large amount of samples be divided into SDGs and, at the same time each SDG be put on a separate page (or pages) on the DST. This helps clarify what qualifiers are appropriate for individual SDGs.

7. There are no blank results listed in DST. Normally the field and equipment blank results are listed with the sample results (by SDG) since they are, in fact, a sampling result. Some of these blank results that were used as a basis for qualifiers are given in Appendix B. The results are not shown on the DST and the Form Is for these values were not in the data package. No oversight on blank contamination could be accomplished.

8. One page of the DST has no positive results (for total and dissolved) TAL metals. These Form Is could not be found in the data package.

9. None of the TCLP or general chemistry results could be verified on the DST because these Form Is were not included in the data package.

I have attached, for your information, an outline of the contents that is required in the data packages. I have also attached a Glossary of Data Qualifiers that is currently being used for inorganic data validation.

If you have any questions about this oversight, please call.

ATTACHMENTS

GLOSSARY OF DATA QUALIFIER CODES (INORGANIC)

CODES RELATED TO IDENTIFICATION
(confidence concerning presence or absence of analytes):

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

(NO CODE) = Confirmed identification.

B = Not detected substantially above the level reported in laboratory or field blanks.

R = Unreliable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.

CODES RELATED TO QUANTITATION
(can be used for both positive results and sample quantitation limits):

J = Analyte Present. Reported value may not be accurate or precise.

K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.

[] = Analyte present. As values approach the IDL the quantitation may not be accurate.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

UL = Not detected, quantitation limit is probably higher.

OTHER CODES

Q = No analytical result.

DATA VALIDATION CONTENTS

Narrative

The narrative describes and summarizes the results of the analytical process. It is composed of:

Overview - Describes the sample set (e.g. number of samples, matrices) and informs the user of the method of analysis.

Summary - Provides a synopsis of the sample analysis and advises the user of any unsuccessful analyses.

Major issues - Presents issues which directly affect data quality in an adverse manner. May include statements regarding suspect and unusable data, or problems concerning sample integrity.

Minor issues - Summarizes data qualifiers that have been applied to positive values or quantitation limits and informs the user of the limitations of data use.

Attachments

Each report must have the following attachments:

Appendix A - Glossary of data qualifiers

Appendix B - Data Summary Forms (Regional data summary forms are available from the Quality Assurance Branch.)

Appendix C - Results as reported by the laboratory (Form 1 or equivalent)

Appendix D - Results of all Tentatively Identified Compounds which have been corrected to exclude blank contamination (Organics only)

Appendix E - Support documentation which substantiates qualifiers placed on data during review (i.e. method blank forms, calibration forms, quantitation reports).